

REMARKS

STATUS OF CLAIMS

In accordance with the foregoing claims 1-19, 22-34, 37, 38, 40-49 and 51-54 are cancelled without prejudice or disclaimer and claims 55-66 are added.

No new matter has been added.

The Examiner's rejections are respectfully traversed.

CLAIM REJECTIONS:

The independent claims are 55, 57 and 64.

In the plasma display panel (PDP), as described by Fig. 5 in the application specification, the emission luminance characteristics of the phosphors to the number of emissions are different due to each of the primary colors.

In view of this point, the embodiment according to claim 55, for example, recites: "varying a number of sustain pulses when a display ratio of an image is varied; and adjusting an amplitude of at least one of the plurality of primary color video signals input to correct while balance when the number of sustain pulses is varied." Support for claim 55 can be found, for example, in the specification at page 22, line 10 to page 25, line 4 and, for example, in Fig. 8. In Fig. 8, the coefficients of the corrections when the number of emissions is varied are different in each primary color. For example, in Fig. 8, even when the number of emissions of the blue signal is varied, the signal might not be corrected and its video is displayed at the same gray level as that in inputting the signal. In contrast, when the number of emissions of the red signal is varied, the signal might be corrected and its video is displayed at a gray level different from that in inputting the signal. That is, the variation ratios of the gray levels are different in each primary color.

Nagakubo (U.S. Patent No. 5,757,343) discloses that the adjustment to the number of times of emission and the gain adjustment to the pixel data are performed in accordance with the luminance adjustment, thus making it possible to continuously adjust the luminance (col. 3, lines 19-23). However, Nagakubo fails to disclose, either expressly or implicitly, the claimed "varying a number of sustain pulses when a display ratio of an image is varied; and adjusting an amplitude of at least one of the plurality of primary color video signals inputted to correct while balance when the number of sustain pulses is varied." That is, Nagakubo fails to disclose, either expressly or implicitly, that the point that when number of sustain pulses is varied, the amplitude

of the signal or the gray level in each of the primary colors is varied.

Furthermore, Mizushima (U.S. Patent No. 4,193,095) discloses that the white balance is corrected by adjusting the amplitudes of the primary color signals, but fails to teach that when the number of sustain pulses is varied, the amplitude of the signal or the gray level in each of the primary colors is made different. That is, Mizushima fails to disclose, either expressly or implicitly, the claimed "varying a number of sustain pulses when a display ratio of an image is varied; and adjusting an amplitude of at least one of the plurality of primary color video signals inputted to correct while balance when the number of sustain pulses is varied," as recited, for example in claim 55.

Accordingly, Applicants respectfully submit that a prima facie case of obviousness cannot be based upon Nagakubo and Mizushima because there is no evidence that one skilled in the art would combine Nagakubo and Mizushima and modify the combination to include the claimed "varying a number of sustain pulses when a display ratio of an image is varied; and adjusting an amplitude of at least one of the plurality of primary color video signals inputted to correct while balance when the number of sustain pulses is varied," as recited in claim 55 and seen the benefit of correct while balance of the plasma display apparatus.

Independent claim 57 is related to a displaying method of a plasma display apparatus, including:

varying a gray level of a video input at a predetermined gray level by setting, when a total number of sustain pulses in a frame is a first pulse number and by setting, when the total number of sustain pulses is a second pulse number different from the first pulse number; and

carrying out the color display by making a first variance ratio differ from a second variance ratio, the first variance being obtained at a gray level in a first primary color among the plurality of primary colors when the total number of sustain pulses is changed from the first pulse number to the second pulse number, and the second variance being obtained at a gray level in a second primary color different from the first primary color when the total number of sustain pulses is changed from the first pulse number to the second pulse number.

Accordingly, Applicants respectfully submit that claim 57 patentably distinguishes over the cited references. Support for claim 55 can be found, for example, in the specification at page 22, line 10 to page 25, line 4 and, for example, in Fig. 8.

Independent claim 64 is related to a displaying method of a plasma display apparatus, including:

varying a gray level of a signal to be input when a total number of sustain pulses is changed from a first pulse number to a second pulse number; and

carrying out the color display by making a first variance ratio differ from a second variance ratio, the first variance being obtained at a gray level in a first primary color from among the plurality of primary colors when the total number of sustain pulses is changed from the first pulse number to the second pulse number, and the second variance being obtained at a gray level in a second primary color different from the first primary color when the total number of sustain pulses is changed from the first pulse number to the second pulse number.

Accordingly, Applicants respectfully submit that claim 64 patentably distinguishes over the cited references. Support for claim 55 can be found, for example, in the specification at page 22, line 10 to page 25, line 4 and, for example, in Fig. 8.

Dependent claims recite patentably distinguishing features of their own or are at least patentably distinguishing due to their dependence from the independent claims. Withdrawal of the rejection of pending claims and allowance of pending claims is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: October 28, 2007

By: 

Matthew H. Polson
Registration No. 58,841

1201 New York Ave, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501